



The Backwards Bike

https://www.youtube.com/watch?v=MFzDaBzBIL0



What Is Critical Thinking?

The art of analyzing and evaluating thinking with a view to improve it.

An effective critical thinker:

- ✓ Raises vital <u>questions</u> and problems, formulating them clearly and precisely
- ✓ Gathers and assesses relevant information
- ✓ Comes to conclusions and solutions, testing them against relevant criteria and standards
- ✓ Thinks, assessing assumptions, consequences, and
- ✓ Communicates effectively with others in figuring out solutions to complex problems

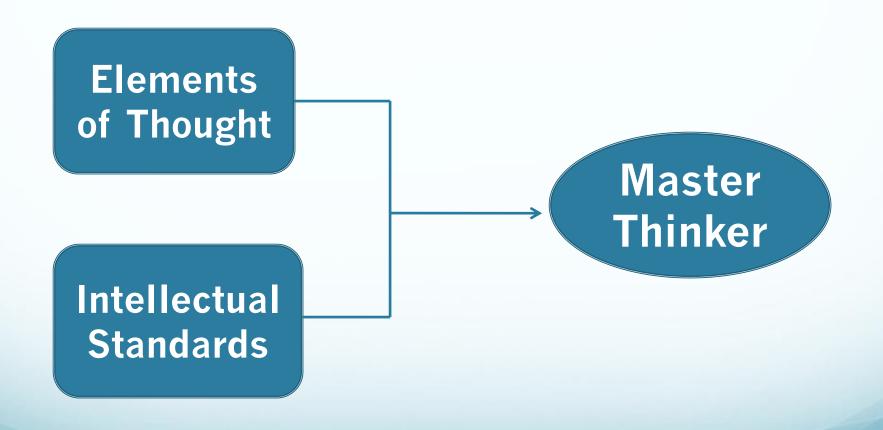


Why Critical Thinking?

Critical thinking is purposeful and reflective judgment about what to believe or what to do in response to observations, experience, verbal or written expressions, or arguments.



Developing Critical Thinking The Paul + Elder Model





Taking Thinking Apart

Points of View

frame of reference, perspective, orientation

Purpose of the Thinking

goal, objective

Implications & Consequences

Consequences

Assumptions presupposition, taking for

granted

Concepts

theories, definitions, axioms, laws, principles, models

Question at Issue

Elements

Thought

Information

problem

data, facts, observations, experiences

Interpretation & Inference

conclusions, solutions

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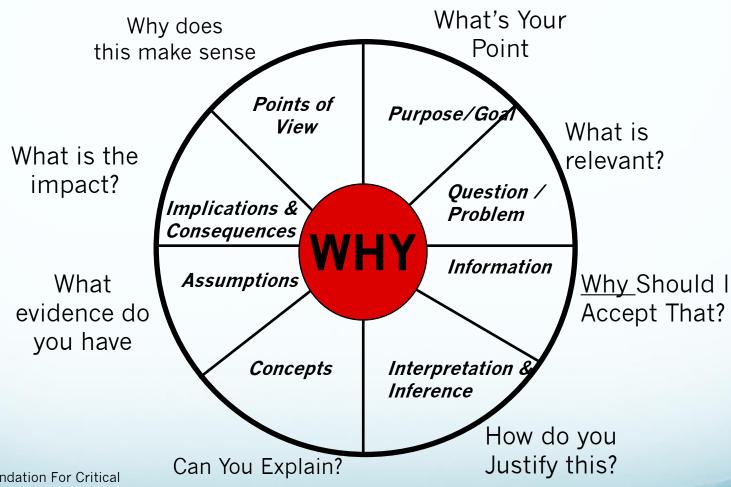


Useful Questions

- √ "What's your purpose?"
- √ "What is important?" "WHY"
- √ "What information is needed?" "WHY"
- √ "Can you explain this?"
- √ "What am I taking for granted?"
- √ "What am I implying?" "WHY"
- √ "What is my point of view?" "WHY"



Target Areas



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Universal Intellectual Standards

Testing the quality of your thinking



Clarity

Could you elaborate further? Could you give me an example? Could you illustrate what you mean?

Accuracy

How could we check on that? How could we find out if that is true? How could we verify or test that?

Precision

Could you be more specific? Could you give me more details? Could you be more exact?

Relevance

How does that relate to the problem? How does that bear on the question? How does that help us with the issue?

Depth

What factors make this a difficult problem?

What are some of the complexities of this question?

What are some of the difficulties we need to deal with?

Breadth

Do we need to look at this from another perspective?

Do we need to consider another point of view?

Do we need to look at this in other ways?

Logic

Does all this make sense together?

Does your first paragraph fit in with your last?

Does what you say follow from the evidence?

Significance

Is this the most important problem to consider? Is this the central idea to focus on? Which of these facts are most important?

Fairness

Do I have any vested interest in this issue? Am I sympathetically representing the viewpoints of others?



Critical Thinking & Communication

- ✓ What is communication?
- ✓ Why do we communicate?
- ✓ How do we apply critical thinking in conversation?
- ✓ How do we apply critical thinking to presentations?

So . . .

- ✓ Critical Thinking is central to your competence, regardless of your job or position
- ✓ You must PRACTICE critical thinking skills—they don't happen by accident
- ✓ If not now, when? If not here, where? If not you, who?

Make better decisions

